

## ABSTRACT OF DISCLOSURE

Ideal arch wires for use in correcting orthodontic deficiencies are described. The arch wires are sized small, medium and large to fit a dental maxillary arch, typically having a radius of curvature of 25.4125 mm, 26.75 mm or 28.0875 mm. The medium radius value is determined from an average sum of maxillary anterior tooth sizes of patients having an ideal occlusion from historical patient data collected and reported by Dr. W. A. Bolton. The small and large values are plus and minus one standard deviation from the medium value. Also described are the matching arch wires sized to fit the mandibular arch. The arch wires may be formed in round, square or rectangular cross-sections of metal, typically of stainless steel or super-elastic preformed material, or of any other suitable material.